

UNITED STATES PATENT AND TRADEMARK OFFICE

711 HA

UNITED STATES DEPARTMENT OF COMMERC United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,727	11/25/2003	Charles E. Narad	P17969	7350
50890 7590 02/28/2008 CAVEN & AGHEVLI c/o INTELLEVATE P.O. BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER	
			. AHMED, SALMAN	
			ART UNIT	PAPER NUMBER
·			2619	
			MAIL DATE	DELIVERY MODE
			02/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/722,727	NARAD, CHARLES E.				
Office Action Summary	Examiner	Art Unit				
	SALMAN AHMED	2619				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.11 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 36(a). In no event, however, may a will apply and will expire SIX (6) MO , cause the application to become	ICATION. a reply be timely filed ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 1/15/	<u>′2008</u> .					
,	This action is FINAL . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.				
Disposition of Claims		•				
4) Claim(s) 1-29 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-29</u> is/are rejected.	6)⊠ Claim(s) <u>1-29</u> is/are rejected.					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.	•				
Application Papers	· ·					
9)☐ The specification is objected to by the Examine	۲.	•				
10)⊠ The drawing(s) filed on <u>11/25/2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119		•				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	·					
1) Notice of References Cited (PTO-892)		Summary (PTO-413) b(s)/Mail Date				
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	_	Informal Patent Application				

Application/Control Number: 10/722,727 Page 2

Art Unit: 2619

DETAILED ACTION

Claims 1-29 are pending.

Claims 1-29 are rejected.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 states "a next component coupled directly downstream from the first component in the receive path is to pull the generated packets from a data stream of the receive path."

It is unclear as to which component (first component or next component) is pulling generated packets from a data stream. It is further unclear as to which component is generating the packets. As such claim 29 is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2619

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 5, 8-11, 13, 14, 16, 17, 19-23 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang (US PAT PUB 2003/0210652) in view of Raphaeli et al. (US PAT PUB 2003/0103521, hereinafter Raphaeli) and Cheng (US PAT PUB 2006/0227712, hereinafter Cheng).

In regards to claims 1 and 25 Chiang teaches a set of at least one component to Handle packets, comprising: a first component (Figure 2, MAC 621), comprising: an input interface to receive data of packets (Figure 2, physical layer device (PHY) 622); an output interface (Figure 2, a direct memory access (DMA) engine 6214); circuitry (Figure 2, control packet generator 6212) to: generate packets such that data values within the generated packet payloads include data originating within the first component (section 0030, depending on the types of objects, various management information data are included in the control packet CP, for example the number of received packets, number of transmitted data, colliding packets, CRC error, over-sized packets, undersized packets, packet settings, packet parameters and/or specially defined packet particulars); and transmit packets via the output interface (Figure 2, transmitting via direct memory access (DMA) engine 6214) to a component (layer 75) further along a receive path monotonically ascending layers of a protocol stack (section 0035, The third to seventh layers, indicated by a numeral reference 75, are equivalent to upper-level application programs, e.g. the network communication protocol, the SNMP and other communication protocol layers), the packets to transmit including the generated packets

Art Unit: 2619

(control packets CP) and packets including data of packets (data packets DP) received via the input interface (section 0035, In a receiving procedure, the control packet CP is generated in the layer 72 and then put into the data packets DP to be transmitted to the layer 74. The data packets DP and the control packet CP are then respectively transmitted to the layer 75 via the layer 74).

Chiang does not explicitly teach control packet having a header with payload as in claim 1. Chiang does not explicitly teach having a header for identification by component further along the receive path, as in claim 25.

Raphaeli in the same field of endeavor teaches control packets having a header with payload (section 0265-0267, the frame format for the control frame is comprised of a frame control (header) followed by a payload).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chiang's system/method by incorporating the control packets having header portion and payload portion as suggested by Raphaeli. The motivation is that, (as suggested by Raphaeli, section 0271) the frame header provides parameters about the frame payload and enables a system to efficiently and reliably identify the frame type (control frame, data frame, status frame etc.) and related frame parameters.

In regards to claim 1, Chiang and Raphaeli do not explicitly teach the data comprise a sequence number.

Cheng in the same field of endeavor teaches MAC response comprises a sequence number (paragraph 0065).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chiang and Raphaeli's system/method by incorporating the steps of MAC response comprising a sequence number as suggested by Cheng. The motivation is that (as suggested by Cheng, paragraph 0057) with the transmission status indication from the MAC layer, the upper layer starts the retransmission for the failed frames, releases the memory of the successful frames from a transmission buffer thereafter; thus increasing not only the efficiency of the bandwidth usage, i.e., much less or no more upper layer NAK indications sent over the physical interface, but also the throughput memory efficiency of the node.

In regards to claim 28, Chiang teaches a method, the method comprising: generating, at a first component (Figure 2, MAC 621), a packet having a payload including data originating within the first component (section 0030, depending on the types of objects, various management information data (payload) are included in the generated control packet CP, for example the number of received packets, number of transmitted data, colliding packets, CRC error, over-sized packets, under-sized packets, packet settings, packet parameters and/or specially defined packet particulars); and transmitting the packet to a second component (layer 75) further along a receive path monotonically ascending layers of a protocol stack (section 0035, In a receiving procedure, the control packet CP is generated in the layer 72 and then put into the data packets DP to be transmitted to the layer 74. The data packets DP and the control packet CP are then respectively transmitted to the layer 75 via the layer 74).

Chiang does not explicitly teach packet having a header with payload.

Art Unit: 2619

Raphaeli in the same field of endeavor teaches packets having a header with payload (section 0265-0267, the frame format for the control frame is comprised of a frame control (header) followed by a payload).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chiang's system/method by incorporating the packets having header portion and payload portion as suggested by Raphaeli. The motivation is that, (as suggested by Raphaeli, section 0271) the frame header provides parameters about the frame payload and enables a system to efficiently and reliably identify the frame type (control frame, data frame, status frame etc.) and related frame parameters.

In regards to claim 28, Chiang and Raphaeli do not explicitly teach the data comprise a sequence number.

Cheng in the same field of endeavor teaches MAC response comprises a sequence number (paragraph 0065).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chiang and Raphaeli's system/method by incorporating the steps of MAC response comprising a sequence number as suggested by Cheng. The motivation is that (as suggested by Cheng, paragraph 0057) with the transmission status indication from the MAC layer, the upper layer starts the retransmission for the failed frames, releases the memory of the successful frames from a transmission buffer thereafter; thus increasing not only the efficiency of the bandwidth usage, i.e., much less or no more upper layer NAK indications sent over the physical interface, but also the throughput memory efficiency of the node.

Art Unit: 2619

In regards to claim 2, Chiang teaches *first component* (Figure 2, MAC 621) comprises a PHY (Figure 2, physical layer device (PHY) 622).

In regards to claim 3, Chiang teaches the input interface comprises signal to digital conversion circuitry, the circuitry operating on at least one of the following: optic signals, wire signals (section 0009 Ethernet network), and wireless signals (section 0003, the physical layer device 12 receives and converts (digital conversion circuitry) packets from the network (section 0009 Ethernet network) into desired forms, such as digital forms).

In regards to claim 5, Chiang teaches the data originating within the first component comprises at least one status of the PHY (section 0030, depending on the types of objects, various management information data are included in the control packet CP, for example the number of received packets (a status of the PHY), number of transmitted data (a status of the PHY), colliding packets (a status of the PHY), CRC error, over-sized packets (a status of the PHY), under-sized packets (a status of the PHY), packet settings (a status of the PHY), packet parameters and/or specially defined packet particulars).

In regards to claims 8 and 19, Chiang teaches circuitry to determine when to transmit the generated packets (section 0021, the control packet is generated by the control packet generator when the MIB counters indicate at least one of the counted values of the management information data exceeds a threshold value).

Chiang, Raphaeli and Cheng do not explicitly teach the circuitry is in PHY as in claim 8.

Art Unit: 2619

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chiang, Raphaeli and Cheng's system/method by incorporating the teaching of circuitry being in PHY, as circuitry can be located in any component section based on system need, available space within the chip/board, cost and resource requirement to meet the need of a required form factor suggested by the standards; thus making the product compatible with available systems in the industry.

In regards to claims 9 and 20, Chiang teaches a second component (the second layer 74 in Figure 3), the second component to identify packets generated by the PHY/Framer (section 0035).

In regards to claims 10 and 21, Chiang teaches *a component* (Figure 3 and section 0035, the second layer 74 is equivalent to the driver 64) to intercept the packets generated by the PHY/framer (section 0035).

In regards to claim 11, Chiang teaches the second component comprises at least one of a framer, a device driver (Figure 3 and section 0035, the second layer 74 is equivalent to the driver 64), and a processor.

In regards to claim 13, Chiang teaches a framer (Figure 2, section 0030, the control packet generator 6212 which generates control packet CP).

In regards to claim 14, Chiang teaches input interface comprises an interface to a PHY (Figure 2, physical layer device (PHY) 622).

In regards to claim 16, Chiang teaches the data originating within the framer comprises at least one network interface statistic (section 0030, depending on the types of objects, various management information data are included in the control packet CP,

Art Unit: 2619

for example the number of received packets, number of transmitted data, colliding packets, CRC error, over-sized packets, under-sized packets, packet settings, packet parameters and/or specially defined packet particulars).

In regards to claim 17, Chiang teaches at least one network interface statistic comprises at least one of: packets received, packets transmitted, bytes received, and bytes transmitted (section 0030, depending on the types of objects, various management information data are included in the control packet CP, for example the number of received packets, number of transmitted data, colliding packets, CRC error, over-sized packets, under-sized packets, packet settings, packet parameters and/or specially defined packet particulars).

In regards to claim 22, Chiang teaches the framer comprises at least one of: an Ethernet media access controller (MAC) (Figure 2, MAC 621), a High-Level Data Link (HDLC) framer, and a Synchronous Optical NETwork (SONET) framer.

In regards to claim 23, Chiang teaches a second input interface (section 0035, the second layer 74 in Figure 3 which is equivalent to the driver 64 of FIG. 2) to receive packets along a transmit path (Figure 3, left arrows going downward); a second output interface (section 0035, the first layer 72 of the OSI model is equivalent to the network interface card 62 in the embodiment of FIG. 2); and circuitry (section 0035, the second layer 74 in Figure 3 which is equivalent to the driver 64 of FIG. 2) to: identify packets in the transmit path destined for the framer (Figure 2, MAC 621); examine the contents of a packet destined for the framer, the contents identifying at least one of: at least one statistic to include in the generated packets, a request to generate at least one packet

Art Unit: 2619

(section 0035, query or polling), at least one time to generate at least one of the generated packets (section 0035, It is to be noted that only the control packet CP transmitted between the layer 72 or the network interface card 62 and the layer 74 or the driver 64 are transmitted according to the general packet transmission manner. For the transmission of the control packet CP from the layer 74 or the driver 64, it is conducted in response to the query or polling of the upper-level protocol layers 75 or the network communication protocol layer 65); and transmit packets not destined for the framer (data packets DP) via the second output interface (section 0035, the first layer 72 of the OSI model is equivalent to the network interface card 62 in the embodiment of FIG. 2) to a component (Figure 2, PHY 622) further along a transmit path monotonically descending layers of a protocol stack (Figure 3, and section 0035, in a transmission procedure, the data packets DP asserted in the layer 74 is combined with the control packet CP and transmitted downwards).

In regards to claim 26, Chiang teaches the set of at least one component comprises a PHY component (Figure 2, PHY 822) and a framer component (Figure 2, Control Packet Generator 6212), and wherein at least one of the PHY component and the framer component comprises the circuitry to generate packets in the receive path (section 0030, when at least one of the management information data has a count exceeding a threshold value, the control packet generator 6212 generates a control packet CP).

In regards to claim 27, Chiang teaches a network interface controller (NIC) (FIG. 1, a network interface card 1 has a controller associated with it).

Art Unit: 2619

In regards to claim 27, Chiang teaches a next component (Figure 2, physical layer device (PHY) 622) coupled directly downstream from the first component in the receive path is to pull the generated packets from a data stream of the receive path (paragraph 0030, The physical layer device 622 receives and converts the data packets DP received from the Ethernet 61 into desired forms and then transmit them to the MAC 621).

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang, Raphaeli and Cheng as applied to claim 1 above and further in view of Krishna et al. (US PAT 6094439, hereinafter Krishna).

In regards to claim 4, Chiang, Raphaeli and Cheng teach a MAC component with PHY as described in the rejections of claim 1 above.

Chiang, Raphaeli and Cheng do not explicitly teach output interface comprises a Media Independent Interface.

Krishna in the same field of endeavor teaches a special reconciliation layer, referred to as the multi-Media Independent Interface (m-MII), interfacing with the MAC (column 4 lines 1-16).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chiang, Raphaeli and Cheng's system/method by incorporating the teaching of a special reconciliation layer, referred to as the multi-Media Independent Interface (m-MII), interfacing with the MAC as suggested by Krishna. The motivation is that (as suggested by Krishna, column 4 lines 1-16) special

Art Unit: 2619

reconciliation layer, referred to as the multi-Media Independent Interface (m-MII), which interfaces with the MAC, provides service functions required to efficiently and reliably distribute, multiplex, demultiplex, and aggregate traffic to and from physical layer (PHY) devices having transceivers.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang, Raphaeli and Cheng as applied to claim 1 above and further in view of Rubino et al. (US PAT 6424629, hereinafter Rubino).

In regards to claim 6. Chiang teaches the data originating within the first component comprises at least one status of the PHY (section 0030, depending on the types of objects, various management information data are included in the control packet CP, for example the number of received packets, number of transmitted data, colliding packets, CRC error, over-sized packets, under-sized packets, packet settings, packet parameters and/or specially defined packet particulars).

Chiang, Raphaeli and Cheng do not explicitly teach the status having link up and link down info.

Rubino in the same field of endeavor teaches when the first protocol layer logic detects a logical channel failure that results in a logical connection failure, the first protocol layer logic triggers a routing table update by sending a signal (status) to the second protocol layer logic indicating that the logical connection failed. Likewise, when the first protocol layer logic determines that communication over the failed logical connection is restored, the first protocol layer logic triggers a routing table update by

Art Unit: 2619

sending a signal (status) to the second protocol layer logic indicating that the logical connection is restored. The logical channel can be a physical communication channel (column 4 lines 44-53 and column 16 lines 9-10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chiang, Raphaeli and Cheng's system/method by incorporating the teaching of the status having link up and link down info as suggested by Rubino. The motivation is that (as suggested by Rubino, column 3 lines 10-12) this method allows a system to quickly and efficiently reconverge when the status of connection changes.

5. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang, Raphaeli and Cheng as applied to claim 1 above and further in view of Eatherton (US PAT 6697382, hereinafter Eatherton).

In regards to claims 7 and 18 Chiang and Raphaeli teach a MAC component with PHY and data originating within the MAC as described in the rejections of claim 1 above.

Chiang, Raphaeli and Cheng do not explicitly teach the data comprises a timestamp.

Eatherton in the same field of endeavor teaches control packet comprises a timestamp (column 5 lines 20-32).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chiang, Raphaeli and Cheng's system/method by

Art Unit: 2619

incorporating the teaching of control packet comprising a timestamp as suggested by Eatherton. The motivation is that (as suggested by Eatherton, column 1 lines 36-40) such method reliably and efficiently enables components to be synchronized; that is, each of the components reflect substantially the same time (within some small tolerance).

6. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang, Raphaeli and Cheng as applied to claim 1 above and further in view of Bullman et al. (US PAT PUB 2003/0028658, hereinafter Bullman).

In regards to claim 12, Chiang, Raphaeli and Cheng teach a MAC component with PHY as described in the rejections of claim 1 above.

Chiang, Raphaeli and Cheng do not explicitly teach the PHY further comprises circuitry to intercept PHY configuration packets traveling along a transmit path monotonically descending the layers of the protocol stack.

Bullman in the same field of endeavor teaches PHY register read and write command packets are generated by the extended protocol layer and are intercepted (intercept circuitry) and parsed by the extended PHY device. The registers are any set of registers that are included in the extended PHY device to carry out any desired operations and services in the network. These registers may include conventional status registers such as the and/or any additional registers which are required due to modifications to standards (PHY configuration), introduction of new standards (PHY configuration), or for some other reason (Figure 2 and section 0024 and section 0022).

Art Unit: 2619

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chiang, Raphaeli and Cheng's system/method by incorporating the teaching of circuitry to intercept PHY configuration packets traveling along a transmit path monotonically descending the layers of the protocol stack as suggested by Bullman. The motivation is that such method enables a system to reliably and efficiently configure the PHY via higher layer protocol; thus enable the system to communicate seamlessly with the network.

In regards to claim 24, Chiang teaches eliminating the control packets from their packet stream (Figure 3, shows Control Packet CP in the down arrow direction gets absorbed by element 72, first layer 72 of the OSI model is equivalent to the network interface card 62, and Data Packets CP continues to the network).

In regards to claim 24, Chiang, Raphaeli and Cheng do not teach configure packet generation based on configuration packets received.

Bullman in the same field of endeavor teaches configure packet generation (Figure 2 and section 0024 and section 0022, modifications to standards, introduction of new standards) based on configuration packets (PHY register write command packets) received (Figure 2 and section 0024 and section 0022, PHY register read and write command packets are generated by the extended protocol layer and are intercepted and parsed by the extended PHY device. The registers are any set of registers that are included in the extended PHY device to carry out any desired operations and services in the network. These registers may include conventional status registers such as the

Art Unit: 2619

and/or any additional registers which are required due to modifications to standards, introduction of new standards, or for some other reason).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chiang, Raphaeli and Cheng's system/method by incorporating the teaching of configure packet generation based on configuration packets received as suggested by Bullman. The motivation is that such method enables a system to reliably and efficiently configure the PHY and MAC via higher layer protocol; thus enable the system to communicate seamlessly with the network and its own higher layer protocol.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang, 7. Raphaeli and Cheng as applied to claim 1 above and further in view of System Packet Interface Level 4 (SPI-4) Phase 2 Revision 1: OC-192 System Interface for Physical and Link Layer Devices, hereinafter SPI-4 Phase 2.

In regards to claim 15, Chiang, Raphaeli and Cheng teach a MAC component with PHY as described in the rejections of claim 1 above.

Chiang, Raphaeli and Cheng do not explicitly teach the using System Packet Interface (SPI) for output interface.

SPI-4 Phase 2, in the same field of endeavor teaches using System Packet Interface (SPI) for output interface from PHY (page 8 figure 5.1).

It would have been obvious to one having ordinary skill in the art at the time the

Art Unit: 2619

invention was made to modify Chiang, Raphaeli and Cheng's system/method by incorporating the teaching of using System Packet Interface (SPI) for output interface from PHY as suggested by SPI-4 Phase 2. The motivation is that, (as suggested by SPI-4 Phase 2, page 8), SPI-4 has many advantages like Point-to-point connection (i.e., between single PHY and single Link Layer device), support for 256 ports (suitable for STS-1 granularity in SONET/SDH applications (192 ports) and Fast Ethernet granularity in Ethernet applications (100 ports)), in-band port address, start/end-of-packet indication, error-control code etc. Further motivation is that The motivation is that it is advantageous to adapt to known standards for implementation of SPI-4 Phase 2 based communication for following reason: Companies actively involved in adhering to standards more frequently reap short- and long-term cost-savings and competitive benefits than those that do not. Standardization can lead to lower transaction costs in the economy as a whole, as well as to savings for individual businesses. Standards have a positive effect on the buying power of companies. Standards can help businesses avoid dependence on a single supplier because the availability of standards the market. The result is a broader choice for businesses opens increased and increased competition among suppliers. Companies also have confidence in the quality and reliability of suppliers who use standards. In addition, standards are used by businesses to exert market pressure on companies further down the value chain, i.e., their clients. Thus, businesses can use standards to broaden their potential markets.

Application/Control Number: 10/722,727 Page 18

Art Unit: 2619

Response to Arguments

8. Applicant's arguments, see pages 8 of the Remarks section, filed 1/15/2008, with respect to the objection to the specification have been fully considered and are persuasive. The objection to the specification has been withdrawn.

- 9. Applicant's arguments, see pages 8-10 of the Remarks section, filed 1/15/2008, with respect to the rejections of the claims have been fully considered and are not persuasive. The Applicant has amended independent claims 1 and 28. Applicant's amendment necessitated a new ground of rejection presented in this office action. As such, any further response to Applicant's argument is moot.
- 10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/722,727 Page 19

Art Unit: 2619

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SALMAN AHMED whose telephone number is (571)272-8307. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SA Salman Ahmed Examiner Art Unit 2619 2/19/2008

EDAN . ORGAD SUPERVISORY PATENT EXAMINER